

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 09-096903

(43)Date of publication of application : 08.04.1997

(51)Int.Cl.

G03F 7/004  
G03F 7/004  
G03F 7/004  
G03F 3/10  
G03F 7/027  
G03F 7/029  
G03F 7/032  
G03F 7/20  
G03F 7/34

(21)Application number : 07-274957

(71)Applicant : TOPPAN PRINTING CO LTD  
SHOWA DENKO KK

(22)Date of filing : 28.09.1995

(72)Inventor : HIRAYAMA SHIGERU  
WATANABE JIRO  
ISHIGURO MASA  
SUGITA SHUICHI  
KAMATA HIROTOSHI

(54) IMAGE FORMING SHEET, IMAGE FORMING METHOD USING SAME AND SIMPLE PROOF OBTAINED BY SAME

(57)Abstract:

**PROBLEM TO BE SOLVED:** To easily form a color image from a digital signal at a low cost by incorporating a shelf stabilizer consisting of a disimidazole compd. and a tri (substd.)phenylsulfonium salt each having a specified structure and a dye complex type photopolymn. initiator into a photosensitive layer.

**SOLUTION:** This image forming sheet has a photosensitive layer consisting essentially of a coloring material, a polymerizable compd. having an ethylenically unsatd. group, a hot-adhesive binder made of an org. polymer having no photopolymerizability and a photopolymn. initiator made of a complex of a near IR absorbing cationic dye with a borate anion represented by formula I on the substrate and a shelf stabilizer consisting of a bisimidazole compd. represented by formula II and a tri(substd.)phenylsulfonium salt represented by formula III is contained in the photosensitive layer. In the formula I, D<sup>+</sup> is a cationic dye having light absorption in a near IR region and each of R<sub>1</sub>-R<sub>4</sub> is a residue such as alkyl or aryl. In the formula II, each of L<sub>1</sub>-L<sub>3</sub> is aryl or substd. aryl. In the formula III, X<sup>-</sup> is an arbitrary anion such as BF<sup>-</sup> or PF<sup>-</sup> and each of L<sub>1</sub>-L<sub>3</sub> is H or an arbitrary substituent.

